NEWS LETTER

Society of American Bacteriologists

OFFICE OF THE SECRETARY-TREASURER

STERLING WINTHROP RESEARCH INSTITUTE
RENSSELAER, N. Y.

VOLUME 19 | *September 1953* | NUMBER 4

1953 OFFICERS AND COUNCILORS

President: G. M. DACK, University of Chicago, Chicago, Illinois
Past President: R. J. DUBOS, Rockefeller Institute for Medical Research, New York, N. Y.
Vice-President: C. B. VAN NIEL, Hopkins Marine Station, Pacific Grove, California
Secretary-Treasurer: J. H. BAILEY, Sterling-Winthrop Research Institute, Rennsselaer, N. Y.
Business Manager: F. C. HARWOOD, Mt. Royal and Guilford Aves., Baltimore 2, Maryland
Councilors-at-Large: SARA E. BRANHAM, National Institutes of Health, Bethesda, Maryland
C. H. WERKMAN, Iowa State College, Ames, Iowa
J. E. BLAIR, Hospital for Joint Diseases, New York, N. Y.
W. H. EWING, Communicable Disease Center, Chamblee, Georgia

Councilors Elected by Local Branches:

J. S. Youngner, Pittsburgh, Pennsylvania ..... *Allegheny*
R. B. Houlihan, Berkeley, California ..... *Northern California-Hawaii*
S. C. Rittenberg, Los Angeles, California ..... *Southern California*
Richard Thompson, Denver, Colorado ..... *Colorado-Wyoming*
P. B. Cowles, New Haven, Connecticut ..... *Connecticut Valley*
Murray M. Streitfeld ..... *South Florida*
H. J. Shaughnessy, Chicago, Illinois ..... *Illinois*
R. Thompson, Indianapolis, Indiana ..... *Indiana*
Louis P. Gebhardt, Salt Lake City, Utah ..... *Intermountain*
D. F. Holtman, Knoxville, Tennessee ..... *Kentucky–Tennessee*
Elizabeth I. Petran, Baltimore, Maryland ..... *Maryland*
W. W. Ferguson, Lansing, Michigan ..... *Michigan*
George Reddish, St. Louis, Missouri ..... *Eastern Missouri*
C. A. Hunter, Topeka, Kansas ..... *Missouri Valley*
Vincent Groupé, New Brunswick, New Jersey ..... *New Jersey*
Erwin Neter, Buffalo, New York ..... *Central New York*
Julia M. Coffey, Albany, New York ..... *Eastern New York*
Richard Donovick, New York, New York ..... *New York City*
J. L. Etchells, Raleigh, North Carolina ..... *North Carolina*
D. W. Watson, Minneapolis, Minnesota ..... *North Central*
L. W. Slanetz, Durham, New Hampshire ..... *Northeast*
O. B. Weeks, Moscow, Idaho ..... *Northwest*
J. M. Birkeland, Columbus, Ohio ..... *Ohio*
E. H. Spaulding, Philadelphia, Pennsylvania ..... *Eastern Pennsylvania*
A. E. de Arêa Leão, Rio de Janeiro, Brazil, South America ..... *Rio de Janeiro*
Hilary Koprowski, Pearl River, N. Y. ..... *U. S. A. representative to Rio Branch*
Marion Hood, New Orleans, Louisiana ..... *South Central*
Mildred A. Engelbrecht, University, Alabama ..... *Southeastern*
R. M. Pike, Dallas, Texas ..... *Texas*
J. D. Reid, Richmond, Virginia ..... *Virginia*
J. E. Faber, Jr., College Park, Maryland ..... *Washington, D. C.*

Invited Members (Nonvoting):

J. R. Porter, Editor-in-Chief, THE JOURNAL OF BACTERIOLOGY; P. W. Wilson, Editor-in-Chief, BACTERIOLOGICAL REVIEWS; H. B. Woodruff, Editor-in-Chief, APPLIED MICROBIOLOGY; J. Y. Sugg, Chairman of the Program Committee; G. J. Jann, Chairman of the Division of General Bacteriology; Morris Schaeffer, Chairman of the Division of Medical Bacteriology, Immunology and Comparative Pathology; A. G. Lochhead, Chairman of the Division of Agricultural and Industrial Bacteriology; D. J. O'Kane, Chairman of the Division of Physiology; and J. H. Richardson, Supervisor of Local Branches

Council Policy Committee:

G. M. Dack, *Chairman* J. H. Bailey, *Secretary*
R. J. Dubos C. B. Van Niel J. R. Porter
J. H. Hanks (1953) W. W. Umbreit (1954) C. A. Stuart (1955)

THE EARLY AND SOMEWHAT DIVERTING HISTORY OF THE DIVISION OF PHYSIOLOGY, SOCIETY OF AMERICAN BACTERIOLOGISTS*

During the first 40 years of meetings papers dealing with bacterial physiology were scattered among the three constitutionally recognized sections: the GENERAL, the MEDICAL, and the AGRICULTURAL AND INDUSTRIAL. Originally, most of these papers were delivered in the GENERAL BACTERIOLOGY section, but in the late twenties an increasing number began to appear in the AGRICULTURAL-INDUSTRIAL because of the increasing interest among members of this section in the mechanism of bacterial fermentations. During the thirties, members who were presenting such papers requested The Program Committee to consolidate papers dealing with bacterial physiology into one or more sessions of the GENERAL division. Among the most active in this movement were the groups at Iowa State led by Professor C. H. Werkman, at Chicago (S. A. Koser) Cornell (J. M. Sherman), Wisconsin (Baldwin, Fred, Peterson) and, of course, Barnett Cohen. A specific proposal to this effect was made at the 38th meeting (Indianapolis, 1936). Apparently nothing was done at the 39th meeting, but at the 40th meeting in San Francisco (1938) one full morning was devoted to a joint meeting of all sections at which a program dealing with "Enzymes in Relation to Bacteriology" was arranged by René Dubos. With President P. F. Clark in the chair 6 invited papers in the GENERAL division were delivered.

At the 41st annual meeting a session with 11 papers in the GENERAL BACTERIOLOGY was called Physiology. As was customary in this division the president of the society (A. T. Henrici) acted as chairman. Actually the session in the AGRICULTURAL AND INDUSTRIAL division more nearly reflected current physiological interest than did this one in GENERAL BACTERIOLOGY. The next year *Physiology* was replaced by a session on *Metabolism*, but this meeting at St. Louis had a definite physiological aura. In addition to this round-up of 9 papers on bacterial metabolism, another session was on *Bacterial Structure* (10 papers given but only 3 definitely on structure) and another on *Growth* (10 papers). All these programs were given under GENERAL BACTERIOLOGY. In the AGRICULTURAL AND INDUSTRIAL division 10 papers were scheduled on *Fermentation*, but these no longer reflected investigations of mechanisms but rather applied studies. As the writer recalls, the demand for a more satisfactory arrangement was again brought up at the session on Growth; the net result was that the first 10 papers in the GENERAL BACTERIOLOGY session at the 43rd (Baltimore) meeting were grouped as a program dealing with *Physiology* and *Biochemistry*.

The actual birth of the *Physiology* division apparently was not only illegitimate, but also the offspring was in a sense still-born. At the 44th general meeting scheduled for Columbus, Ohio in December, 1942, the program lists a division of *Physiology* and *Biochemistry* presenting 13 papers with its own chairman (S. A. Koser) under the GENERAL BACTERIOLOGY section. Just what this dual programming represented is not clear since no other Division had an analogous arrangement. Moreover, the 13 papers of this yeastbud-like division was followed by a more conventional section on *Bacteriologic Techniques* presided over by the customary chairman of the GENERAL division, the president of the society (S. A. Waksman). No problems arose, jurisdictional or otherwise, however, as the meeting had to be called off at the last minute because of the events following December 7, 1941.

The next meeting of the Society was held in New York during the war (May, 1944). In the wide-spread seriousness of that meeting (many of our members were in uniform), it probably went unnoticed that the Society had acquired a new division. Although the umbilical cord to the mother GENERAL had not yet been severed completely (the papers were still listed with a "G" number, and the section was placed in GENERAL BACTERIOLOGY), it had its own chairman (S. A. Koser) and met separately. Under the rather unattractive listing of *Unclassified*

* This historical note dealing with the formation of the division of Bacterial Physiology in the Society of American Bacteriologists constitutes a facet to the *Survey of Physiological Sciences* initiated by the American Physiological Society (*Science*, June 20, 1952). The author is a member of the Central Committee of the Survey.

NOTICE

Members are requested to address all correspondence concerning applications for membership, payment of dues, changes of address, lost copies of the *Journals*, resignations and the like directly to:

Society of American Bacteriologists
Mr. Francis C. Harwood,
Business Manager
Mt. Royal and Guilford Avenues
Baltimore 2, Maryland

Remittances should be made payable to: Society of American Bacteriologists.

Studies another session of GENERAL was held simultaneously with its traditional chairman, the president of the Society. Of the 137 papers given at this 45th annual meeting only 9 were allocated to the *Physiology* and *Biochemistry* section.

The somewhat casual organization of the section at this time is illustrated by its method of selecting officers. At New York, Dr. Koser having discharged his duty to the section after the delays occasioned by the war period, the writer was asked to organize the program for the next meeting. Unable to attend this meeting, he suggested that others assume this responsibility. Drs. I. C. Gunsalus and J. W. Foster presided over a program embracing 17 of the 30 papers listed in the GENERAL section (total number of papers at the meeting—137). Some regularity in the selection of presiding officers was achieved at this meeting when a business meeting was scheduled for the first time to replace the unlisted rump sessions that characterized previous meetings. The elation of the members of the section at this evidence of having a vague, officially recognized existence was somewhat dampened at the 47th annual meeting in Philadelphia the following year. The program of the section was scheduled for the last day of the meeting after many had left. As a result the business session greatly resembled a protest meeting during which the newly elected officers were instructed to inform the Program Committee that "we were tired of being treated as a stepchild of the Society, and that next year we expected to have a more suitable time of meeting and the obvious physiological papers assigned to our section." The complaint regarding the time could be defended, but the dearth of papers (18 of the 60 in GENERAL—176 total), probably resulted because most of the energies of the physiologists were concentrated on three evening symposia at the expense of the regular program.

Meritorious or merely brash, the protest must have had some effect since the next year at Minneapolis, the section enjoyed not only a desirable time but choice room, the Minnesota Terrace, which doubled as a night club after dinner. The relative number of papers remained unchanged: 18 of the 69 scheduled in GENERAL of a total of 205 for all sections. At the following meeting (49th) in Cincinnati another milestone was reached that went unnoticed—for the first time the group was completely freed of its now tenuous connection with the GENERAL section. It became another section in organization as well as in fact when the papers were assigned the new designation "P". The honor of delivering the initial P1 paper in the *Society* went to S. H. Hutner who spoke in another converted night club, the Pavilion Caprice, on "Some miscellaneous observations on overcoming inhibitory effects of chelating nutrients." Perhaps reflecting their newly won independence the section made a better showing in the number of papers: 27 of the 186 given at the meeting. Parenthetically, it is emphasized that the number of papers given in the *Physiology* section in its formative years do not accurately reflect the activities of its members. A study of the programs reveals that the physiologists were responsible for many more symposia and round table discussions than their relative number in the *Society* would suggest. These extra-curricular activities testify not only to the vigor of the membership but also to the developing interest in bacterial physiology within the *Society*.

During the next three years the relative position of the *Physiology* section in the *Society* was considerably improved as evidenced by the number of papers assigned to the section:

Year	*Meeting*	*Physiology*	*Total*
1950	50th—Baltimore	51	261
1951	51st—Chicago	54	275
1952	52nd—Boston	69	312

The Boston meeting was notable for the new high in both the absolute and relative number of papers given in the *Physiology* section, but even more important the section finally attained official status. The alert secretary of the *Society*, Henry Scherp, noted that for several years (since 1949) four independent sections had been meeting although the constitution provided for only three. Recognizing a *fait accompli* when he saw one, Scherp proposed that the *Physiology* section be legitimatized. The Council agreed and their action was approved in the Business meeting. The necessary legislation for removal of the bar sinister and entitling the section to be written PHYSIOLOGY was reported in the August, 1952 issue of the *News-Letter:*

Bylaw 3. In the April, 1952, issue of the *News-Letter*, it was pointed out that for the last four years at least, a Division of the S.A.B. had operated *de facto* under the title "Physiology," but the existence of such a Division had apparently never been recognized officially. The Division had, however, apparently met with general approval. In accordance with the provisions of Articles XI and XII of the Constitution, the Council authorized the formation of a fourth Division of the Society, to be entitled the "Division of Bacterial Physiology," and proposed that Bylaw 3 (Divisions) be changed to read as follows:

"The Society shall be organized into four Divisions: (a) General Bacteriology; (b) Medical Bacteriology, Immunology and Comparative Pathology; (c) Agricultural and Industrial Bacteriology; and (d) Bacterial Physiology."

The revision was approved without dissent.

PERRY W. WILSON
Department of Bacteriology
University of Wisconsin

NOMINATIONS FOR 1954

The Nominating Committee for 1953 (Dr. Rene J. Dubos, Chairman, Dr. J. J. R. Campbell, Dr. Charles F. Niven, Jr., Dr. Nathan R. Smith and Dr. Marvin L. Speck) has submitted the following nominations for office in 1954. One candidate is to be elected to the office of Vice-president and two as Councilors-at-Large. Biographical data are adapted from "American Men of Science". Ballots will be mailed in the autumn in accordance with the provisions of the Constitution.

For President

Dr. Cornelis B. Van Niel, Hopkins Marine Station, Pacific Grove, Calif. Born Nov. 4, 1897 in Haarlem, Holland, Naturalized citizen, U.S.A. 1942. Chem. E., Tech. Univ, Delft, Holland, 23, D.Sc., 28; hon. D.Sc., Princeton, 40. Conservator, microbiol. lab. Tech. Univ., Delft, Holland, 24–28; assoc. prof. microbiol., Hopkins Marine Station, Stanford, 28–35, prof., 35–46. Herzstein prof. biol. 46–. Inf. Dutch Army, 17–19. Nat'l. Acad.; A.A.; Soc. Nat.; S.A.B.; Soc. Plant Physiol.; Philos. Soc.; fel. Calif. Acad.; Soc. Gen. Microbiol., Gt. Brit.; Nederlansdehe Vereen, Voor Microbiol. General Microbiology; biochemistry of microorganisms; photosynthesis.

For Vice-president

Dr. William C. Frazier, University of Wisconsin, Madison, Wis. Born Madison, Wis. Sept. 26, 1896. B.S. Wisconsin 23, Ph.D. (ag. bact.) 25 Instructor, Wisconsin 19–24, assoc. bacteriologist & sr. bacteriologist, Bureau Dairy Indust. U. S. Dept. Agr. 23–34; Prof. agr. bact. & chairman dept. bact. Wisconsin 34– U.S.A. 17–19; A.A.; S.A.B. (Councilor 39, Secy-Treas 44); Inst. Food Tech.; Dairy Sci. Assn.; Mis. Acad; assoc. Int. Asn. Milk & Food Sanitarians. Microbiol. of milk and cheese; starter bacteria; dissociation; antibiotics; penicillin; food yeasts; alcoholic fermentation; 2,3-bytylene glycol production; mastitis; Bang's disease; flat sour bacteria.

Dr. H. O. Halvorson, University of Illinois, Urbana, Ill. Born March 26, 1897, River Falls, Wis. B.S. Minnesota 21, fellow 21–22; ch.E. 22; Ph.D. 28. Teaching fellow bact. Minnesota 22–23; instr. 23–28, asst. prof. 28–30; assoc. prof. 30–40; prof. 40–49; Prof. & Head of Dept. Ill. 1949–. Civilian with O.S.R.D.; U.S.A. U.S.N. QMC, U.S.A. 1917–19. Physiol. of bact.; bio. chem.; food tech.; sanitary engin.; sewage treatment processes; germicidal detergents; trans. of iron in nature.

Dr. Carl S. Pederson, N. Y. State Agricultural Experiment Station, Geneva, N. Y. Born April 30, 1897, South Milwaukee, Wis. B.S. Wis. 24; M.S. 25; Ph.D. (bact.) Cornell 29. Instr. chem. Wis. 23–25; asst., Cornell and N. Y. Exp. Station, Geneva 25–29, assoc. research, 29–31; Prof. in Bact. & Chief in Research 31–. S.A.B.; Pub. Health Assn.; Inst. Food Tech.; Food fermentations; bacterial physiology; food spoilage; processing and preservation of food products.

For Secretary-Treasurer

Dr. John Hays Bailey, Sterling Winthrop Research Institute, Rensselaer, N. Y. Born Chicago, Ill. May 3, 1900. B.S. Chicago, 24, Ph.D. 28; D.P.H., Michigan 38. Asst. anat. Chicago, 26–28; fellow Nelson Morris Instit. 28–29; Huesman fellow, J. Aimes Whitcomb Riley Hosp. and mem. dept. pediat., school med. Indiana 29–32; res. Munic. Contagious Disease Hosp. Chicago 32–35; Sr. bacter. State Dept. Health, Ill., 35–38; asst. prof. bacter. and director div. bacter., dept. priv. med., pub. health and bacter., sch. med. Loyola (Ill.) 38–41; research bacteriologist Winthrop Chem. Co. Rensselaer, N. Y. 42–45; Chief Bacteriologist Sterling Winthrop Research Institute 43–. Civilian with Office Sci. Research and Develop. A.A.; S.A.B.; (Secretary-Treasurer 1953; formerly councilor East. N. Y. Branch, mem. ed. board J. Bact.) N. Y. Acad. Sci.; fel. Inst. Med. Chi.; Soc. Gen. Microbiol, Gt. Br. Antibody formation; types of streptococci in normal and diseased children; mode of action of antibiotics; antibiotics of plant origin; penicillin; resistance to antibiotics.

For Councilor-at-Large

Dr. Ralph V. Hussong, Deerfield, Ill. Born Corwith, Ia. Oct. 31, 1904. B.S. Iowa State College 26; M.S. 28; Ph.D 32; asst. dairy bact. Iowa State College 26–31, instr. 31–34 asst. prof. 34–35; bacteriologist Sugar Creek Creamery Co. 35–44; prof. dairy bact. Illinois, 44–48; chief bacteriologist Kraft Foods Co. 48–. Bact. of butter; classification of microorganisms; bacteriology of cheese.

Dr. A. F. Langlykke, E. R. Squibb & Sons, New Brunswick, N. J. Born Pleasant Prarie, Wis. July 17, 1909. B.S. Wisconsin 31; M.S. 34; Ph.D. (biochem.) 36. Foreman Proctor and Gamble Co. Chicago 31–32; asst. Wisconsin 32–36; Dow Fellow 36–37; research chemist, Hiram Walker & Sons, Inc. 37–40; superintendent, Butyl Alcohol Plant Central Lafayette Arroyo, P.R. 40–43; acting head agr. motor fuels div., Northern Regional Research Lab. U. S. Dept. Agr. Ill., 43; div. head 45–47; chief, pilot plant div. and chief tech. officer Chemical Warfare Service, Md. and Ind. 43–45; Director, Microbiol. develop., E. R. Squibb & Sons 47–49 Research & Develop 49–. Consultant, Joint Research & Develop Board; collaborator, U. S. Dept. Agr. A.A. A.C.S., S.A.B. Inst. Chem. Eng.; London Biochem. Soc. Fermentation of wood sugars; by-products and fuel from distillery residues; refining of fermentation butanol and

acetone; phage of butyl alcohol bacteria; production of antibiotics and biologicals.

Dr. Kenneth B. Raper, University of Wisconsin, Madison, Wis. Born Welcome, N. C. July 11, 1908, A.B. North Carolina 29; A.M. George Washington 31; Scholar, Harvard 34–35; A.M. 35; Austin Fellow 35–36; Ph.D. (biol.) 36, Jr. mycologist, div. soil microbiol. U.S.D.A. 29–34; bur. plant industry 34–36, asst. mycologist 36–40; microbiologist, fermentation div. N.R.R.L. 40–41; Sr. microbiologist, Northern Regional Research Laboratory 41–42; Bureau Agr. & Indust. Chem. 42–47; Prins. microbiol. 47–53; Prof. Wis. 1953–. Nat. Acad.; A.A., Bot. Soc.; Mycol. Soc.; S.A.B. fellow Am. Acad. Morphology and Physiology of Acrasicae; development of improved penicillin producing molds; taxonomy of Aspergillis and Penicillium; fermentative fungi.

Dr. Robert L. Starkey, N. J. Agricultural Experiment Station, New Brunswick, N. J. Born Fitchburg, Mass. Sept. 27, 1899. B.S. Mass. College 21; M.S. Rutgers 23; Ph.D. (mycobiol.) 24. Asst. N. J. Exp. Sta. 22–24; instr. bacter. Minn. 24–26; asst. prof., Microbiol. Rutgers 26–34; assoc. prof. 34–44; Prof. 44–. assoc. soil microbiol. N. J. Exp. Station 26–44; Research Specialist Microbiol. 44–. Rockefeller Foundation fellow, Tech. Hoogesch. Delft, Holland 37–38. S.A.T.C. 17–19; A.C.S. S.A.B.; Soil Sci.; Soc.; Theobald Smith Soc. (pres.) Decomposition of organic matter; nitrogen fixation; transformation of sulphur and iron; industrial fermentations.

Dr. Ralph P. Tittsler, U. S. Bureau of Dairy Industry, Washington, D. C. Born April 10, 1899, New Bedford, Pa. B.S. Pa. State College 22, M.S. 26; Ph.D. (bact.). Rochester 33. Instr. bact. and asst. animal path. R. I. State Col. 22–24; instr. bacter. Pa. State College 24–26, asst. prof. 26–30; instr. sch. med. & dentistry, Rochester 30–33, Asst. prof. 33–38; assoc. bacteriologist, Bur.-Dairy Industry U.S.D.A. 38–44; Bacteriologist 44–. S.A.B.; Dairy Sci. Assoc.; Wash. Acad. (manager, 44). Bacterial electrophoresis; poultry diseases; metabolism and taxonomy of Escherichia-Aerobacter and the Lactobacillus and Propionibacterium genera; bacteriology of cheese.

SOCIETY AWARDS

The Commercial Solvents Corporation Award for 1952 was awarded to Drs. Ibert C. Wells, E. A. Doisy, Edwin E. Hays and William L. Gaby for their work on the Pyos. Their investigations were begun prior to 1945 while Drs. Wells and Hays were graduate students working in Dr. Doisy's department. After receiving their degrees the award winners continued their work at the various institutions with which they had become associated and in 1952 published the definitive work on the problem.

Dr. Joshua Lederberg was chosen as the Eli Lilly Award winner for 1953 in recognition of his outstanding contributions to the field of bacterial genetics.

REPORT OF THE COMMITTEE ON CERTIFICATION AND PROBLEMS OF PERSONNEL—JULY 1, 1953

General Carl Spaatz once said of President Coolidge, "He thinks things through very carefully before going off half-cocked." Since its reorganization 12 months ago, this committee has been thinking things over very carefully, but to avoid going off half-cocked, we decided to proceed cautiously and consult frequently with the administrative officers and councillors. Our work so far has been exploratory, but at this time we recommend for discussion and approval by the Council Policy Committee and by the Council that certain steps be taken.

I. *Interest in Certification.* We have been using the informal method of determining where interest in certification exists. This approach turns out to be inadequate. Therefore, we request that the Secretary-Treasurer be instructed to enclose with the November 1953 News Letter the following post-card questionnaire:

1. Which *one* of the following Divisions of the S.A.B. most closely describes your microbiological interests:
   (a) General Bacteriology....:
   (b) Physiology....:
   (c) Agricultural and Industrial Bacteriology ....:
   (d) Medical Bacteriology, Immunology and Comparative Pathology....?
2. Is it your opinion that an attempt should be made to develop a program for certification in the Division you checked? Yes.... No....

Comments:

Signature (optional)

II. *Certification Program.* The only area of microbiology in which we have detected a lively interest in certification is that commonly referred to as medical, or possibly by the broader term "public health". At the time of the Boston meeting in 1952, there was reason to believe that certification in the medical field was to be achieved by the establishment of the American Board of Medical Microbiology through the Agency of the A.M.A. Although such a Board may come into being in the meantime, we are of the opinion that this committee should seriously consider certification under the auspices of the S.A.B. Therefore, we are concentrating upon a program for that area roughly represented by the Division of Medical Bacteriology, Immunology and Comparative Pathology.

Some of the features we intend to include are:

1. The certifying Board would be incorporated for legal reasons but sponsored by and under the supervision of the S.A.B.

2. Requirements for certification would include satisfactory academic training at the doctorate level, *and* several years' subsequent experience in the practice of the specialty during which an acceptable degree of competence must be demonstrated.

3. It would carry a "grandfather" clause.

4. It would contain a provision for those individuals who do not meet the academic requirement but who have achieved wide recognition for outstanding attainment in the field.

5. The area of Medical Bacteriology, Immunology and Comparative Pathology is interpreted to include not only microbiologists in hospitals and other diagnostic laboratories but also those engaged in teaching or research in the general area of public health.

Therefore, we request permission from the Council Policy Committee and from the Council to draw up a formal program for certification in this area.

III. *Intersociety Committee on Laboratory Services Related to Health.* In our first report (January 1953 News Letter) we described the inception of this Committee, then called "Intersociety Conference Table". At that time we recommended that the S.A.B. be provisionally represented during the organizational meetings of this group. As soon as the official report of the first meeting of the Intersociety Conference became available, it was sent to all members of the Council with the request that they solicit opinions within the local branches. We received 14 replies; 12 definitely approved of S.A.B. participation, one made a minor reservation and one made a strong reservation which appeared to be based on a misunderstanding.

Dr. Dack approved S.A.B. representation at a subsequent meeting of the Intersociety Conference which was attended by two members of our Committee (E. H. S. and N. C. L.). The significant information pertaining to and the actions taken at that meeting are reproduced below. The material in quotes are excerpts from the official report.

"On October 20, 1953 representatives of six societies met in Cleveland, Ohio to discuss a unified approach to the solution of several problems which they share in common. After consultation with the governing bodies of these organizations, a second meeting was called to implement the cooperative program which had been proposed. Following is a report of this second meeting held in Philadelphia on June 5, 1953. At this meeting a seventh society, the American Chemical Society, was represented".

"The representatives present took the following action.

1. *Name of the committee.*
   The committee is to be called "The Intersociety Committee on Laboratory Services Related to Health."

2. *Statement of aims.*
   It is the object of this committee to improve the standards of laboratory services related to health. This is to be accomplished by cooperative efforts of the participating scientific societies.

Among the objectives are:

(a) to define laboratory practice as related to health,
(b) to recommend standard qualifications for personnel in laboratories related to health,
(c) to cooperate with educational institutions in developing curricula for training of personnel for laboratories related to health,
(d) to encourage professional certification of individuals in the scientific specialties practiced in laboratories related to health,
(e) to promote desirable patterns of approval of laboratories related to health,
(f) to foster career opportunities in laboratories related to health.

6. *Funds*
   Those societies which are able will each contribute $25 at this time to help defray cost of office work. This fund will be made available to Dr. Borg.

10. *Chairman*
    Dr. Alfred F. Borg was asked to continue as Temporary Chairman, at least until the next meeting".

Comment. The eventual cost of participation in the Intersociety Committee on Laboratory Services cannot be estimated, but at the moment it is limited to office expenses and travel to regular meetings.

We recommend to the Council Policy Committee and to Council that the S.A.B. become formally affiliated with the Intersociety Committee on Laboratory Services Related to Health, and that the sum of $100 be appropriated for the year 1953–54 with the understanding that $25 of this is to be used for the purpose stated in item #6 above and the remainder for the expenses of the S.A.B. representatives.

It should be made perfectly clear that the Committee on Certification and Problems of Personnel holds as its primary objective the certification of microbiologists by microbiologists. One member of this Committee expresses concern that participation in the Intersociety Committee may become so burdensome as to jeopardize our main objective, and we have detected similar sentiment from outside of the Committee. Nevertheless, it is to be noted that the phrase "Problems of Personnel" is a part of the name of this Committee. And the members do agree that the Intersociety Committee, being an organization committed to the purpose of raising the level of laboratory service related to health, deserves the support of the S.A.B. Matters of vital concern to the personnel

of the S.A.B. are involved, and we believe more can be accomplished through cooperative effort than by one society alone.

IV. *Relationship to the Committee on Curricula.* We wish to reemphasize (see January 1953 News Letter) that the development of an acceptable certification program will be greatly facilitated by—if not actually dependent upon—the establishment of a program of accredited curricula for the baccalaureate through the doctorate degrees. We hope therefore, that the excellent progress made by the Committee on Curricula will be extended to doctorate training.

In its April 15, 1953 report, the Committee on Curricula proposes a definition of a Qualified Bacteriologist and suggests criteria for accrediting individuals. Thus, the work of the Committee on Curricula and the Committee on Certification and Problems of Personnel merge at this point. In order to assure close cooperation and avoid duplication of effort we suggest that the respective chairmen become members of both committees.

LESTER KRAMPITZ
NORMAN C. LAFFER
MORRIS L. RAKIETEN
EARLE H. SPAULDING, *Chairman*

NEWS OF OUR MEMBERS

Dr. Virginia Whiteside-Carlson, formerly research associate in the Department of Biochemistry, Medical College of Alabama, has been appointed assistant professor of biochemistry.

R. J. Strawinski, formerly Head of Microbiology Section, The Texas Company, has been appointed Assistant Professor of Bacteriology at Louisiana State University. Dr. Strawinski will continue his investigations of microbial action on petroleum hydrocarbon oils.

F. Eugene Nelson, Professor of Dairy Bacteriology at Iowa State College, received the Borden Award for research in Dairy Manufacturing at the 48th Annual Meeting of the American Dairy Science Association held at the University of Wisconsin in June. The award, which consists of a gold medal and $1000, was given for research on enumeration of dairy microorganisms, protease and lipase production by dairy microorganisms and characterization of bacteriophages active against lactic dairy cultures.

Dr. S. Bayne-Jones has retired as President of the Joint Administrative Board of the New York Hospital-Cornell Medical Center. Dr. Bayne-Jones has moved to Washington, D. C. where he will work on a full time basis as civilian Technical Director of Research of the Army Medical Research and Development Board, Office of the Surgeon General, Department of the Army.

REPORT OF THE REPRESENTATIVE OF THE SOCIETY OF AMERICAN BACTERIOLOGISTS TO THE MEDICAL SCIENCES DIVISION OF THE NATIONAL RESEARCH COUNCIL

The phenomenal development of microbiology during the past decade has been paralleled by the growth of the Society of American Bacteriologists, whose membership has trebled to reach a total of slightly over 4,800 at the end of 1952. Concomitantly, the circulation of the Society's journals (*Journal of Bacteriology* and *Bacteriological Reviews*) has broadened until they have one of the largest circulations of biological periodicals in the world. At the close of 1952, there were nearly 8,000 subscriptions, comprising all of the members plus nearly 3,000 non members. Likewise, these journals have expanded to keep pace with the increased volume of research seeking publication. Beginning with 1953, arrangements have been made to increase the availability of space by another 25 per cent with a view to serving a larger number of investigators. Also, in January, 1953, a new journal sponsored by the Society, *Applied Microbiology*, made its appearance. Except in the medical field, there have been only scant outlets in this country for what may be described best as technologic microbiology. The new journal is expected to meet the increasing need in this area.

This growth of the Society and the development of the field have brought to the fore serious problems of personnel status and standards of qualification for the practice of microbiology, particularly in its applications to medicine. The Society has had for some years committees seeking solutions to these important matters. In collaboration with the American Board of Pathology, The American Association of Immunologists, and The American Society of Tropical Medicine and Hygiene, and with the approval of the Advisory Board for Medical Specialties and the Council on Medical Education and Hospitals of the American Medical Association in June 1952, the Society presented for approval to the House of Delegates of the American Medical Association a plan for a new specialty board to be entitled The American Board of Medical Microbiology. This proposal provoked an unexpected amount of reaction, and stimulated by a vigorous campaign by the College of American Pathologists, The House of Delegates rejected the plan. Thus for the present the Societys' efforts to correct the generally unsatisfactory state of the practice of microbiology in relation to medicine have been frustrated. The Society has not abandoned, however, its concern for this problem and is at present still seeking to establish mechanisms for the certification of qualified per-

sonnel, within the established framework of specialty boards if possible, or outside of it if necessary.

A parallel development has been the work of a Committee on Curricula, which is expected to present in 1953 a definite plan for the accreditation of departments and institutions offering basic training in microbiology, similar to the program in chemistry that has been operated so successfully for many years by the American Chemical Society. Such a plan is an essential step in defining standards and in raising the professional status of microbiologists.

Respectfully submitted,
HENRY W. SCHERP

COMPLETE SET OF JOURNAL OF BACTERIOLOGY

Dr. Stanley Thomas has a complete, bound, set of the Journal of Bacteriology that he wishes to sell. Anyone interested in purchasing this set should write Dr. Thomas, Department of Biology, Lehigh University, Bethlehem, Pa.

NEWS AND MEETINGS OF LOCAL BRANCHES

Connecticut Valley Branch (Katherine Marden, Secretary)

May 1, 1953. The spring meet ng of the Branch was held in Shanklin Laboratory, Wesleyan University. The guest lecture, "The Bacterial Factor in Traumatic Shock", was given by Jacob Fine, M.D., Beth-Israel Hospital and Harvard Medical School. At the afternoon scientific session the following papers were presented:

1. Morphological Changes Observed in Cells Treated with Aureomycin *in vitro*. Frederick Baker, University of Connecticut.

2. A Comparison of the Effects of Terramycin HCl and Amphoteric Terramycin on the Fecal Flora of Humans S. A. Broitman, J. R. Cohen, and W. Litsky, University of Massachusetts and the Springfield Hospital.

3. Increased Frequency of Reversion in *Salmonella typhumurium* Mutants following Filtrate Treatment. H. H. Plough, H. N. Miller, M. Roberts, and B. Konopka, Amherst College.

4. A Differential Semi-solid Medium for Identification of *Candida albicans*. J. J. Redys, D. E. W. Hibbard, and E. K. Borman, Bureau of Laboratories, Connecticut State Department of Health.

5. The Use of Dye Strips for Cultural Differentiation of *Brucella* Types. H. S. Kayes, D. E. W. Hibbard, and F. L. Mickle, Bureau of Laboratories, Connecticut State Department of Health.

6. A Serological Study of Amino Acid Decarboxylases. A. F. Howe and H. P. Treffers, Yale University.

Southern California Branch (Frances A. Hollman, Secretary-Treasurer)

June 19, 1953. The Southern California Branch met in Santa Barbara as a participating section of the Pacific Division, American Association for the Advancement of Science. The following papers were presented:

1. An Improved Method for the Direct Microscopic Estimation of Microorganisms in Citrus Products. E. R. Wolford. Fruit and Vegetable Laboratory, U. S. Department of Agriculture, Pasadena.

2. The Status of Electron Microscopy on the Pacific Coast. H. Froula, Department of Engineering, University of California, Los Angeles.

3. Recent Developments in the Electron Microscopy of Bacterial Viruses. Robley C. Williams and Dean Fraser. Virus Laboratory, University of California, Berkeley.

4. Ability of *Coccidioides immitis* to Survive Intestinal Passage. Robert Lubarsky and Orda A. Plunkett. Department of Botany (Mycology), University of California, Los Angeles.

5. Concentration and Culturing of Bacteria with Molecular Filter Membranes. Alexander Goetz and Noel Tsuneishi. Department of Physics, California Institute of Technology, Pasadena.

6. Structures Resembling Bacteria in Human Enamel. William E. Hutton. University of California College of Dentistry, San Francisco.

7. The Nitratases and Nitritases of Brucellae. M. J. Pickett and E. L. Nelson. Department of Bacteriology and Department of Infectious Diseases, University of California, Los Angeles.

8. Relationships Between Complement and Sensitized Erythrocytes. David L. McVickar. Department of Infectious Diseases, University of California, Medical School, Los Angeles.

9. Growth of *Pasteurella pestis* and the Production of Soluble Antigens in a Casein Hydrolysate Mineral Glucose Medium. Ellis Engelsberg and Judith Bentoff Levy. The George Williams Hooper Foundation, University of California, San Francisco.

10. Blood Lysozyme Activity. Otto E. Lobstein. The Allan Hancock Foundation, University of Southern California, Los Angeles.

Society of Illinois Bacteriologists (C. J. Rickher, Secretary)

May 16, 1953. The spring meeting was held at the Edgewater Beach Hotel Saturday afternoon and

evening. The afternoon session was devoted to presentation of papers and a sound movie "Pasteur's Legacy". Following dinner in the Michigan Room, Dr. Howard J. Shaughnessy, 1953 recipient of the Society of Illinois Bacteriologists' Pasteur Award, gave the Pasteur Lecture: "Poliomyelitis; Past, Present and Future". Papers presented at the scientific session were:

1. Air-borne Influenza Virus A Infections in Immunized Animals. II, The Effect of Passive Immunity on the Pathologic Process and Antibody Response. Clayton G. Loosli, M.D., Dorothy Hamre, Ph.D.,* and Byron S. Berlin, M.D., Preventive Medicine Section, Department of Medicine, University of Chicago.

2. The Inactivation of the Influenza Virus by Soft Roentgen Rays. Arthur V. Kroeger,* Betty H. Siegel and John E. Kempf. Department of Bacteriology, University of Illinois, College of Medicine, Chicago, Ill.

3. Purification of the Toxin of *Clostridium botulinum*, Type C. Daniel A. Boroff and Helen Dale Cabeen, Research Department, Galesburg State Research Hospital, Galesburg, Ill.

4. Induced Resistance in vitro of Pseudomonas aeruginosa to Neomycin and Streptomycin. Milton Goldin, Mount Sinai Medical Research Foundation, Chicago, Illinois.

5. "Pasteur's Legacy"—Sound Movie.

6. The Relationship between Moisture Content and Equilibrium Vapor Pressure of Moisture in Bacterial Spores and Vegetative Cells. Donald F. Waldhalm* and H. O. Halvorson, Ph.D., Department of Bacteriology, University of Illinois, Urbana, Ill.

7. Problems in the Study of Sporulation by Members of the Genus Bacillus. C. F. Schmidt, Ph.D., Research Laboratories, Continental Can Company, Chicago, Illinois.

8. Biological and Chemical Aspects of Ropy Milk. Daniel L. Jones, Ph.D., Hektoen Institute for Medical Research, Chicago, Illinois.

Michigan Branch (Elizabeth J. Cope, Secretary)

May, 15–16 1953. A bi-state meeting of the Michigan and Ohio Branches in Ann Arbor. Dr. Phillip Edwards, Communicable Disease Center, Chamblee, Ga. gave the evening address entitled: Effect of Filterable Agents on Motility and Antigenic Structure of Bacteria. The program of the general sessions follows:

1. The Role of Lymph Node and Splenic Cells in the Production of Diphtheria Antitoxin. A. B. Stavitsky, Dept. of Microbiology, Western Reserve University, Cleveland, Ohio.

2. Studies of Experimental Allergic Uveitis. T. Suie, M. D. Dodd, J. W. Riddle, H. Farmer, W. D. Rummel, and A. M. Culler, Departments of Bacteriology and Ophthalmology, Ohio State University, Columbus, Ohio.

3. Stability of Pertussis Vaccines. Grace Eldering, Michigan Dept. of Health, Grand Rapids, Michigan.

4. A Polarographic Study of the Potassium Salt of Penicillin G., Jack C. Holland and C. L. San Clemente, Dept. of Bacteriology, Michigan State College, East Lansing, Michigan.

5. Sensitivity of Hemophilus pertussis and Related Organisms to Various Antibiotic Agents. Chester Hornbeck, Michigan Dept. of Health, Grand Rapids, Michigan.

6. Several Factors Affecting Zone Sizes in the Plate Assay of Polypeptide Antibiotics. J. Pinzelik, L. L. Nisonger and F. J. Murray, Dept. of Microbiology, The Wm. S. Merrell Company, Cincinnati, Ohio.

7. Immunization of Mice with Formalinized Western Equine Encephalitis Virus. Isaac Ruchman, Dept. of Bacteriology, Cincinnati General Hospital, Cincinnati, Ohio.

8. Vesicular Exanthema in Swine. Gardner Eversole, Bureau of Animal Industry, Michigan Dept. of Agriculture, East Lansing, Michigan.

9. Recovery and Characterization of the Novy Rat Virus. Russell T. Jordan and Wm. S. Preston, Dept. of Bacteriology, University of Michigan, Ann Arbor, Michigan.

10. The Transmission of Visceral Avian Lymphomatosis by Contact. B. R. Burmester and R. F. Gentry, United States Dept. of Agriculture, East Lansing, Michigan.

11. The Use of Ultraviolet Absorption for the Characterization of the Histochemical Nature of the Negri Body. Henry Wisniewski and Ruth Lofgren, Dept. of Bacteriology, University of Michigan, Ann Arbor, Michigan.

12. Capillary Tube Test for Leptospira Antibodies. R. D. Macmillan and L. C. Ferguson, Dept. of Bacteriology, The Ohio State University, Columbus, Ohio.

13. The Microbiological Treatment of Phenolic Wastes. M. K. Handy, H. H. Weiser and W. D. Sheets, Dept. of Bacteriology and the Engineering Experiment Station, The Ohio State University, Columbus, Ohio.

14. Microorganisms from Caries-free and Caries-active Saliva. G. E. Green and M. C. Dodd, Dept. of Bacteriology, Ohio State University, Columbus, Ohio.

15. *Special Report:* Report of WHO Mission to Yugoslavia. Pearl Kendrick, School of Public Health, University of Michigan, Ann Arbor, Michigan.

16. Potency of Phenolized Rabies Vaccine improved by addition of Merthiolate during Attenuation. Everett Nelson and Harlan D. Anderson, Michigan Dept. of Health, Lansing, Michigan.

17. Virus Symposium: Virus Host-Cell Relationships. Convener, Dr. Gordon C. Brown.

I. Chemical Interference of Poliomyelitis Virus Multiplication. Gordon C. Brown, Dept. of Epidemiology, School of Public Health, University of Michigan, Ann Arbor, Michigan.

II. Chemical Influence on Virus Development. W. W. Ackermann, Dept. of Epidemiology, School of Public Health, University of Michigan, Ann Arbor, Michigan.

III. Establishing Long-term Cultures of Human Cells for the Propagation of Viruses. H. E. Swim, Dept. of Microbiology, Western Reserve University, Cleveland, Ohio.

IV. Injury to Host Cells by Direct Action of Virus. A Concept of the Pathogenesis of Viral Lesions. Harold S. Ginsberg, Dept. of Preventive Medicine, Western Reserve University, Cleveland, Ohio.

Indiana Branch (Ona R. Whitley, Secretary-Treasurer)

October 17, 1952. A joint meeting of the Indiana Branch and the Bacteriology Division of the Indiana Academy of Science was held at Valparaiso University, Valparaiso, Indiana.

1. Lysozyme and gram positive bacteria. Lois C. Myerholtz, and S. E. Hartsell, Purdue University.

2. Effect of antibiotics on bacterial reduction of triphenyltetrazolium chloride (TTC). E. D. Weinberg, Indiana University.

3. Evidence for the coexistence of alternate routes of carbohydrate metabolism in *Penicillium chrysogenum Q176*. Edward C. Heath, Henry Koffler, and E. P. Goldschmidt, Purdue University.

4. Isolation and study of an actinophage isolated from soil. M. M. Hoelm, L. Sitler, and J. M. McGuire, Eli Lilly and Company.

5. A statistical investigation into the factors of a starch-agar, filter-paper disc assay for amylases. Ralph Wellerson, Jr., Phillip A. Tetrault, Carl F. Kossack, and Egon Stark, Purdue University.

6. Nutritional and cytological study of a stalked bacterium from well water. E. A. Grula, and R. H. Weaver, University of Kentucky.

7. Microcinematography of cells in tissue culture, Raymond G. Murray, Indiana University.

8. The development and role of para-aminobenzoic acid in the early chick blastoderm. James D. Ebert, Indiana University.

9. Application of plant tissue culture. Charles W. Hagen, Indiana University.

10. Newer methods and practical applications of tissue culture. Robert N. Hull, Lilly Research Laboratories.

11. Factors affecting growth of mammalian viruses *in vitro*. Randall L. Thompson, Indiana University.

12. Counting infections viral particles in tissue culture. Emilio Weiss, Indiana University.

May 1, 1953. The Spring meeting was held at the Indiana State Board of Health Building, Indianapolis. Dr. E. A. Evans Jr., Department of Biochemistry, University of Chicago, spoke on "Biochemical studies on bacterial viruses" following a guided tour of the Laboratories of the State Board of Health. The afternoon scientific session consisted of the following papers:

1. Effect of the culture medium on the acetate oxidizing system of *Micrococcus pyogenes* var. *aureus*. Millicent C. Goldschmidt and Dorothy M. Powelson, Purdue University.

2. Bacteriophagy of *Clostridium perfringens*. R. W. Sames and L. S. McClung, Indiana University.

3. Effect of ethionine and other materials on Semiliki Forest virus infection in mice. A. R. Lavender and R. L. Thompson, Indiana University Medical School.

4. Studies on the inhibitor for the red cell altering factor of streptococci. Alex C. Sonnenwirth and Merwin Moskowitz, Purdue University.

5. A new technique for growing *H. pertussis* in liquid culture. P. W. Ensminger, and C. G. Culbertson.

6. Inhibitory effects of subtropical plant extracts upon some veterinary and human pathogens. U. J. Siegrist, St. Joseph's College.

7. Leptospirosis in animals. R. V. Johnson, Pitman Moore Company.

Eastern Missouri Branch (John G. Kleyn Secretary-Treasurer)

December 10, 1952. The 49th meeting of the Eastern Missour Branch was held at the Wohl Health Center, St. Louis, at which the following program, followed by refreshments, was presented:

1. Review of work in progress on epidemic hemorrhagic fever. Lt. J. K. Read, 5th Army Medical Laboratory, St. Louis.

2. Microbiological assay. J. B. Dore, Ralston Purina Co., St. Louis.

3. Presentation of Communicable Disease Center films entitled *In Vitro* Virulence Test for *C. diphtheria* and Typing of *C. diphtheria*. Miss L. K. Schultze, St. Louis Health Division Laboratory, St. Louis.

February 10, 1953. The 50th meeting of the Eastern Missouri Branch was held at the Wohl Health Center, St. Louis, at which the following officers for 1953 were elected: President, Edith M. Rich; Vice-President, Loyal W. Hedgewek; Secretary-Treasurer, John G. Kleyn; Councilor, George F. Reddish. Following the business meeting the following papers were presented:

1. An approach to the study of interaction phenomena among pairs of indigenous microorganisms. Dr. Theodore Roseberry and Dr. David

Gale, Washington University School of Dentistry, St. Louis.

2. Actamer: novel anti-microbial agent. Dr. M. C. Hunter, Dr. J. G. Kleyn, Dr. D. P. Roman and Dr. R. S. Shumard, Monsanto Chemical Co., St. Louis.

April 14 1953. The 51st meeting of the Eastern Missouri Branch was held at the Wohl Health Center, St. Louis, at which the following papers were presented:

1. The Use of Selective Media in the Study of the Oral Flora. George F. Reddish, Lambert Pharmacal Company.

2. The development of a complex reproducible sporulation medium and a study of some of the environmental factors that control sporulation of a strain of *Saccharomyces cerevisiae* on that medium. John G. Kleyn, Monsanto Chemical Company, St. Louis.

Maryland Branch (R. J. Allgeier, Secretary)

March 17, 1953. A dinner meeting of the Maryland Branch was held in the Recreation Room of the Psychiatric Institute of the University of Maryland, Baltimore. Following a guided tour through the Institute, Dr. Gladys L. Hobby of Charles Pfizer and Co., Brooklyn, spoke on: Antimicrobial agents, their activities alone and in combination.

April 28, 1953. A joint dinner meeting of the Maryland and Washington Branches was held at the Agricultural Auditorium, University of Maryland. Preceding the dinner Dr. J. Howard Brown of Johns Hopkins University presented his revision of the classification of the genus Streptococcus. Following the dinner Dr. Robert S. Breed, New York Agricultural Experiment Station, Geneva, N. Y., conducted a symposium on taxonomic problems.

South Central Branch (Helen E. Levy, Secretary-Treasurer)

May 2, 1953. The Spring Meeting of the South Central Branch was held at the Baptist Hospital, New Orleans.

1. Serological studies on *Leuconostoc mesenteroides*. C. S. McCleskey, Department of Bacteriology, Lousiana State University.

2. Studies on Erwina and Klebsiella. Barbara Jo Holmes and Margaret H. D. Smith, Department of Microbiology, Tulane University.

3. Antibody production in mice following the injection of varying doses of certain bacterial polysaccharides. Harold Baer, Department of Microbiology, Tulane University.

4. A study of the phosphomonoesterase of two strains of *Serratia indica*. Lewis R. Brown and Arthur R. Colmer, Department of Bacteriology, Louisiana State University.

The New Jersey Branch (The Theobald Smith Society, Marjorie A. Darken, Secretary)

April 9, 1953. The meeting, held at Ciba Pharmaceutical Products, Inc., Summit, was devoted to a discussion of Physiological aspects of cellular division in microorganisms.

1. Effect of magnesium on cellular division in bacteria. Michael Webb, Strangeways Laboratory, Cambridge, England.

2. Cellular division in dimorphic yeasts. Walter Nickerson, Department of Microbiology, Rutgers University.

Erratum. On page 12, Vol. 19, no. 2 of *News Letter*, May 1953, Walter Szybalski should read Waclaw Szybalski.

May 14, 1953. At the meeting held at the New Jersey Agricultural Experiment Station, the following papers were presented:

1. The activity of Candicidin against fungi associated with disease in man. Morris Solotorovsky, Merck Institute for Therapeutic Research.

2. Preservation of parenteral vegetable oils by chemical agents. Phillip C. Eisman, Division of Microbiology, Research Department, Ciba Pharmaceutical Products, Inc.

3. The initiation of infection by Phage. William Gold, Research and Development Laboratories, E. R. Squibb and Sons.

4. Some studies on the physiology of *Trichomonas vaginalis*. A. B. Kupferberg, H. O. Singher, G. Lampson and A. H. Romano, Ortho Research Foundation.

Eastern New York Branch (Hazel V. Roberts Secretary-Treasurer)

April 30, 1953. The Spring meeting of the Eastern New York Branch was held at the Sterling-Winthrop Research Institute, Rensselaer.

1. The significance of the antigens of influenza viruses. C. H. Stuart-Harris, Department of Medicine University of Sheffield, Sheffield, England.

2. Immunity following infection with antigenically different influenza viruses. Irving Gordon, Division of Laboratories and Research, Albany.

3. Studies on the disruption of the influenza virus particle. David A. J. Tyrrell, Hospital of the Rockefeller Institute for Medical Research, New York.

Southern California Branch (Frances A. Hallman, Secretary-Treasurer)

April 14, 1953. A dinner meeting of the Southern California Branch was held on the campus of the University of Southern California. The following papers were presented:

1. Comparison of the growth of *E. coli* on two kinds of Eosin-methylene-blue agar. Robert E.

Levin and Dean A. Anderson, Department of Microbiology, Los Angeles State College.

2. Immunization of Rabbits with vi antigen-coated erythrocytes. David C. Y. Chu and R. E. Hoyt, Department of Bacteriology and Serology, Laboratories of Cedars of Lebanon Hospital, Los Angeles.

3. A rapid method for determination of phosphatase activity in Staphylococci. Maurice White and M. J. Pickett, Department of Bacteriology, University of California at Los Angeles.

Informal presentations were made as follows: Report of the April meetings of the Commission on Standardization of Biological Stains and the Federated Biological Societies. James Bartholomew. Report on the recent meeting of the Border Health Association in El Paso. Charles Carpenter. Report on virus studies of respiratory disease in Los Angeles during the winter 1952–53. Charles Pait and Fred Rasmussen.

Northwest Branch (Elizabeth R. Hall, Secretary-Treasurer)

April 19, 1953. The Spring meeting was held at the University of British Columbia, Vancouver, in conjunction with The British Columbia Academy of Science meetings. The following were elected officers of the Branch: President, Edward L. Foubert Jr., Vice-President, R. E. Hungate; Secretary-Treasurer, Elizabeth R. Hall; Councilor, Owen B. Weeks. The scientific session consisted of the presentation of the following papers:

1. The isolation of *Clostridium hemolyticum*. Louis D. S. Smith, Veterinary Research Laboratory, Montana State College, Bozeman, Mont.

2. Anthrax or allergy? Edward L. Foubert, Jr., Gonzaga University, Spokane, Washington.

3. The effect of medium constituents on the production of *C. welchii* alpha toxin. D. C. B. Duff and J. Currie, Department of Bacteriology and Immunology, University of British Columbia.

4. Studies on the glucokinase of *Pseudomonas putrefacieus*. Harold P. Klein, Department of Microbiology, University of Washington, Seattle.

5. The status of 2 ketogluconate as an intermediate in the oxidation of glucose by *P. aeruginosa*. J. J. R. Campbell and P. Kitos, Department of Dairying, University of British Columbia.

6. Studies on the utilization of glucose and acetate by *Saccharomyces cerevisease*. Norman R. Eaton, Department of Microbiology, University of Washington.

7. The oxidation of metabolically active organic acids of *Torulopsis utilis*. Nora E. Neilson, Department of Dairying, University of British Columbia.

8. Application of quantitative methods of a *C. diphtheriae* host-phage system. Neal B. Groman and Royce Z. Lochart, Department of Microbiology, University of Washington.

9. Bacterial spoilage in whole eggs. P. C. Trussell, British Columbia Research Council.

Missouri Valley Branch (Carl E. Georgi, Secretary-Treasurer)

April 14, 1953. The annual meeting of the Missouri Valley Branch was held at Kansas State College, Manhattan. The following officers were elected: President, Theodore G. Metcalf; Vice-President, Frank Victor; Secretary-Treasurer, Carl E. Georgi; Councilor, Charles A. Hunter. Dr. O. N. Allen, University of Wisconsin was the guest speaker, his subject "New Horizons in Soil Bacteriology." The following papers were presented:

1. An investigation of various conditions affecting viability of *Escherichia coli* in the lyophilized state. W. J. Hausler, Jr. and E. A. Van Eck. Department of Bacteriology, University of Kansas Lawrence, Kansas.

2. Effect of institutional cookery procedures, methods of cooling and conditions of storage on the growth of Micrococcus pyogenes var. aureus in certain foods. M. L. Smull and W. A. Miller, Departments of Institutional Management and Bacteriology, Kansas State College, Manhattan, Kansas.

3. Cell Division in *Micrococcus pyogenes* var. *aureus*. R. B. Webb and J. B. Clark, Department of Plant Sciences, University of Oklahoma, Norman, Oklahoma.

4. The effect of 2,4 Dinitrophenol on acetate oxidation by *Ashbya gossypii*. M. N. Mickelson, Midwest Research Institute, Kansas City, Missouri.

5. The inhibitory action of Vitamin K and related compounds upon fermentation by *Saccharomyces cerevisiae*. C. F. Hinz and J. O. Harris, Department of Bacteriology, Kansas State College, Manhattan, Kansas.

6. Some effects of Vitamin K_1 Phosphate and related Naphthoquinones on the Metabolism of *Saccharomyces cervisiae*. K. R. Long and D. Paretsky, Department of Bacteriology, University of Kansas, Lawrence, Kansas.

7. A bacterial cell wall stain. H. L. Chance, Department of Plant Sciences, University of Oklahoma, Norman, Oklahoma.

8. Inclusion bodies in large forms of *Proteus vulgaris*. J. L. Yudell and H. L. Chance, Department of Plant Sciences, University of Oklahoma, Norman, Oklahoma.

9. A preliminary report on a Cytological Investigation of some Actinomycetes. R. B. Webb, Department of Plant Sciences, University of Oklahoma, Norman, Oklahoma.

10. A preliminary report on cellulose decomposition by organisms of the *Cellulomonas Group*. R. G. Garrison and J. O. Harris, Department of Bacteriology, Kansas State College, Manhattan, Kansas.

11. The effect of CO_2 on Oxygen uptake of "resting" Bacterial Cells. J. O. Harris, Department of Bacteriology, Kansas State College, Manhattan, Kansas.

12. The effect of certain chemical and physical agents on Newcastle Virus. A. Eisenstark and R. Bower, Department of Bacteriology, Kansas State College, Manhattan, Kansas.

13. Effects of Cortisone and X-rays on virus infections in embryonated eggs. A. E. Werder, B. W. Hamilton and B. Hopkins, Department of Medical Microbiology, Medical Center, University of Kansas, Kansas City, Kansas.

14. *In vitro* studies of some effects of combinations of Antibiotic on Microorganisms. M. E. Lockhart and D. Paretsky, Department of Bacteriology, University of Kansas, Lawrence, Kansas.

15. An investigation of Antigen-Antibody reactions on the surface of filter paper employing the surface fixation technic. D. H. Spalding and T. G. Metcalf, Department of Bacteriology, University of Kansas, Lawrence, Kansas.

16. Transmission of enteric organisms in houseflies. B. Greenberg, Department of Bacteriology, University of Kansas, Lawrence, Kansas.

Washington Branch (Bernice Eddy, Secretary-Treasurer)

March 24, 1953. The 191st meeting of the Washington Branch was held in the auditorium of the Army Medical Service Graduate School, at which the following program was presented:

1. Infection following whole-body irradiation. Willie W. Smith, Robert Q. Marston and Leon Gonsbery, Laboratory of Physical Biology, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health.

2. Observations on the nutritional requirements of Bifidus-like bacteria of avian origin. Francis A. Veltre, Mary S. Shorb and Michael J. Pelczar, Jr., Departments of Poultry Husbandry and Bacteriology, University of Maryland.

3. Usefulness of embryonated eggs in studying certain characteristics of Shigella organisms. L. A. Barnes and I. B. Stacy, Jr., Naval Medical Research Institute, National Naval Medical Center.

Northeast Branch (Genevive Young, Secretary-Treasurer)

March 27, 1953. The Spring meeting of the Northeastern Branch was held at Massachusetts General Hospital. The afternoon scientific session consisted of the following papers:

1. Vi agglutinins in serum of normal and immunized individuals. C. A. Stuart, H. R. Seraichekas and M. P. Burnett. Veterans' Administration Hospital, Providence.

2. Activation of latent infection as the result of sub-lethal total body x-irradiation. I. L. Shechmeister and F. L. Adler, Harvard Medical School and Peter Bent Brigham Hospital.

3. Non-hemolytic streptotocci recovered from bacteremia of dental origin. Frederick W. Krauss. Lufts College Dental School.

4. Preliminary report on the possibility of use of hydrocarbon digestors as an index of oil pollution. John W. Hurst, Jr., Fisheries Research Station, Boothbay Harbor, Me.

5. An outbreak of infectious hepatitis: a school physicians problem. Ralph E. Wheeler. Lufts College Medical School.

The evening sessions, following dinner, consisted of an address on Toxoplasmosis by David Weinman, Department of Microbiology, Yale University.

Connecticut Valley Branch (Katherine Marden, Secretary-Treasurer)

May 1, 1953. The Spring Meeting of the Connecticut Valley Branch was held at Shanklin Laboratory, Wesleyan University, Middletown, Conn. The afternoon program consisted of the following papers:

1. Morphological changes observed in cells treated with aureomycin *in vitro*. Frederick Baker, University of Connecticut.

2. A comparison of the effects of terramycin HCl and amphoteric terramycin on the fecal flora of humans. S. A. Broitman, J. R. Cohen and W. Litsky, University of Massachusetts and the Springfield Hospital.

3. Increased frequency of reversion in Salmonella typhimurium mutants following filtrate treatments. H. H. Plough, H. N. Miller, M. Roberts and B. Konopka, Amherst College.

4. A differential semi-solid medium for identification of *Candida albicans*. J. J. Redys, D. E. W. Hibbard and E. K. Borman, Connecticut Department of Health.

5. Use of dye strips for cultural differentiation of Brucella types. H. S. Kays, D. E. W. Hibbard and F. L. Mickle, Connecticut Department of Health.

6. A serological study of amino acid carboxylases. F. Howe and H. C. Treffers, Yale University.

Following a dinner at Downey House, Dr. Jacob Fine, Beth Israel Hospital and Harvard Medical School, spoke on the bacterial factor in traumatic shock.

Eastern Pennsylvania Branch (Ruth E. Miller, Secretary-Treasurer)

March 24, 1953. The 234th meeting of the Eastern Pennsylvania Branch was held at the Auditorium of the Philadelphia County Medical Society Building. The following papers constituted the Scientific program.

1. Studies on the sensitivity of mice to histamine following injection of Hemophilus pertussis. J. Munoz, L. F. Schuchardt and W. F. Verway, Department of Bacteriology, Research Division, Sharpe and Dohme.

2. Localization of enzymes in microorganisms by immunological procedure. Melvina J. Derrick, Ruth E. Miller and M. G. Sevag, Department of Bacteriology, Woman's Medical College of Pennsylvania and Department of Microbiology, School of Medicine, University of Pennsylvania.

3. Competitive antagonism between antiphosphatase antibody and substrate for phosphatase. M. G. Sevag, Melvina J. Derrick and Ruth E. Miller, Department of Microbiology, School of Medicine, University of Pennsylvania and Department of Bacteriology, Woman's Medical College of Pennsylvania.

April 28, 1953. The 235th meeting was held at the Philadelphia County Medical Society Auditorium. The following program was presented:

1. Inspection of certain phenomena in the reaction of bacteria to electrical impulses. Sidney Lolchin and W. R. Hunt, Department of Biology, Lafayette College.

2. Studies on the reversible injury of *Escherichia coli* by streptomycin. A. E. Wasserman, J. M. Lessner and Margaret K. West, Department of Bacteriology, Medical Research Department, Sharpe and Dohme.

3. Enzymologic studies on the mechanism of softening of tubercules. Charles Weiss, J. Tabachnick and H. P. Cohen, Department of Microbiology, Albert Einstein Medical Center, Northern Division.

May 26, 1953. The 236th and final meeting of the current season was held in the auditorium of the Philadelphia County Medical Society, Philadelphia. Dr. Harry Eagle, National Microbiological Institute, Bethesda, Md., spoke on "The binding of penicillin in relation to its cytotoxic action."

Intermountain Branch (L. W. Jones, Secretary)

April 18, 1953. The twelfth semi-annual meeting was held at the Utah State Agricultural College, Logan, Utah. The scientific session consisted of the following papers:

1. Remarks upon the aims and purposes of the Intermountain Branch S.A.B. Paul S. Nicholes, University of Utah.

2. Preparation of cell-free extracts of *Clostridium acidiurici*. W. Bradshaw and J. V. Beck, Brigham Young University.

3. The occurrence of iron oxidizing bacteria in Bingham Canyon Mine water. J. V. Beck and D. King, Brigham Young University.

4. Recent developments in immunity to *Pasteurella pestis* Lt. D. C. Cavanaugh. Utah State Agricultural College.

5. The presence of anti-D antibody in the serum of a cD^u patient. C. I. Argall, J. M. Bull, and E. Trentelman.

6. The stability of chloridane and its effect on microbial activity in soils. L. W. Jones, Utah State Agricultural College.

7. The lysogenicity of *Bacterium tularense* in sodium desoxycholate. H. C. Bubel, University of Utah.

8. Amebiasis in Utah. Ralph Knight, Veterans Administration Hospital, Salt Lake City.

Texas Branch (Frank B. Engley, Jr. Secretary-Treasurer)

May 29–30 1953. The twenty-fourth meeting of the Texas Branch was held at Baylor University, College of Medicine, Houston, Texas. Dr. M. R. J. Salton of the Microbiological Chemistry Unit of the School of Biochemistry, Cambridge University, England gave the I. M. Lewis Lecture on the evening of May 29th. The subject of Dr. Salton's address was "The Preparation and Chemical Constitution of Bacterial Cell Walls." The following papers were presented at the scientific sessions:

1. A comparison of the fungistatic properties of three aromatic diamidines. Willson J. Fahlberg, Department of Microbiology, Baylor University College of Medicine, Houston.

2. Further studies of erythromycin activity against *Corynebacterium diphtheriae*. Robert G. Brown and Frank B. Engley, Jr., Department of Bacteriology and Parasitology, University of Texas Medical Branch, Galveston.

3. Effect of Neomycin on the intestinal flora, John H. Davis, Jr., Anthony A. Contreras, and Rudolph Massari, Surgical Research Unit, Brooke Army Hospital, Fort Sam Houston, San Antonio.

4. Inhibition of blood antibacterial action by gastric mucin. Frank B. Engley, Jr., Martha Jordan, and Carl F. Page, Department of Bacteriology and Parasitology, University of Texas Medical Branch, Galveston.

5. Stages in the life cycle of *Litomosoides carinii*. (Motion picture). Etta Mae MacDonald and J. A. Scott, Department of Preventive Medicine and Public Health, University of Texas Medical Branch, Galveston.

6. Bacteriophage typing of staphylococci isolated in a burns treatment ward. Russell E. Brame, Ruth L. Latta, and L. R. Kuhn, Surgical Research Unit, Brooke Army Hospital, Fort Sam Houston, San Antonio.

7. Ratio of colored and colorless variants of *Serratia marcescens* before and after ultraviolet irradiation. R. P. Williams and R. Miller, Department of Microbiology, Baylor University College of Medicine, Houston.

8. An *in vitro* technique for determining pH changes in dental plaque in the presence of saliva. W. A. Nolte and S. S. Arnim, University of Texas Dental Branch, Houston.

9. A simple medium for counting clostridium spores. William R. Schmieding and E. Staten Wynne, Division of Experimental Pathology, University of Texas M. D. Anderson Hospital for Cancer Research, Houston.

10. *In vitro* testing for leptospiracidal drugs. L. C. Kuhnley and V. T. Schuhardt, Pathological Microbiology Laboratory, Clayton Foundation; and Department of Bacteriology, University of Texas, Austin.

11. Attempts to prepare leptospiral complement fixing antigens. Robert M. Pike, Henry B. Owens, and Robin I. Burdette, Department of Bacteriology, Southwestern Medical School, University of Texas, Dallas.

12. The use of a blood medium for routine isolation of *M. tuberculosis*. Virginia S. Crane, Albert M. Richmond, and Donald H. Hunter, 4th Army Area Medical Laboratory, Fort Sam Houston, San Antonio.

13. The microbiological approach to research in cancer diagnosis. Cora L. Gott and E. Staten Wynne, Division of Experimental Pathology. University of Texas M.D. Anderson Hospital for Cancer Research, Houston.

14. A cyto-immunological response to carcinogenesis. M. Pollard and R. H. Bussell, Department of Preventive Medicine and Public Health, University of Texas Medical Branch, Galveston.

15. Effect of cortisone on experimental rickettsioses and on antibody formation. Dorothy M. Whitney and Ludwik Anigstein, Rickettsial Research Laboratory, University of Texas Medical Branch, Galveston.

16. Observations on immunity in psittacosis. J. V. Irons, M. L. Denley, and Thelma D. Sullivan, Bureau of Laboratories and Division of Epidemiology, State Health Department, Austin.

17. Mixed infections with Coxsackie and Lansing poliomyelitis viruses in mice. S. Edward Sulkin and Craig Wallis, Department of Bacteriology, Southwestern Medical School, University of Texas, Dallas.

18. Heterophile antibody response to immunization with influenza virus. V. T. Schuhardt, Marylyn M. Willsie, and Thelma D. Sullivan, Pathological Microbiology Laboratory, Clayton Foundation; Department of Bacteriology, University of Texas; and State Department of Health Laboratory, Austin.

19. *In vitro* testing of Brucellacidal antibodies produced in rabbits immunized with *Brucella abortus* antigens. Bob A. Freeman and V. T. Schuhardt, Brucellosis Laboratory, Clayton Foundation; and Department of Bacteriology, University of Texas, Austin.

NEW BOOKS

Advances in Enzymology, Volume 14. F. F. Nord, Editor. New York: Interscience Publishers, Inc.; 1953. XIV plus 470 pp., $9.25.

Contents: Probleme des Energietransportsinnerhalblebender Zellen, T. Bucher; Patethine and Related Forms of the *Lactobacillus bulgaricus* Factor, E. E. Snell and G. M. Brown; Metabolism of Phenylalanine and Tyrosine, A. B. Lerner; Oxidation of Proteins by Tyrosinase and Peroxidase, I. W. Sizer; Chemismus der organischen Katalyse, W. Langenbeck; Enzymic Isomerization and Related Processes, L. F. Leloir; Suggestions for a More Rational Classification and Nomenclature of Enzymes, O. Hoffmann-Ostenhof; Quelques Techniques Nouvelles pour l'Etude de la Structure des Proteines, P. Desnuelle; Adsorption Studies of Enzymes and Other Proteins, C. A. Zittle; Principles and Procedures in the Isolation of Enzymes, S. Schwimmer, A. B. Pardee.

The above titles indicate that this volume covers broad fields of enzymology and related subjects. The articles range all the way from progress reports on rapidly moving fields such as Patethine by Snell and Brown to general topics such as Classification and Nomenclature of Enzymes by Hoffmann-Ostenhof. The latter is a most necessary effort in a very confused field. We can hope with the author that "a generally accepted, rational system of enzyme nomenclature and classification" will be adopted in the not too distant future. This volume should find a useful place in the reference library of both the investigator and the advanced student of biochemistry, metabolism, microbiology and related fields.

W. D. BELLAMY

Textbook of Virology (second edition). A. J. Rhodes and C. E. van Rooyen. Baltimore: The Williams and Wilkins Co., 1953. XV plus 559 pp., 76 figs. $8.00.

This is a rather deceptive little volume. On the first, and usually casual, inspection one wonders how well this little tome actually covers the field in comparison to other appreciably larger books on the same subject. However, with thorough and complete reading of any chapter selected at random, one is immediately impressed by the thoroughness and inclusiveness of the authors' presentation. The writing is sharp and concise, which is a basic secret of how the authors have been able to include so much material within so small a volume. If one were to distill the tremendous amount of detailed information in the authors' famous large work on virology (van Rooyen and Rhodes: Virus Diseases of Man), one would have left the hard core of basic knowledge presented in this textbook.

The numerous illustrations are exceedingly well reproduced; as a matter of fact, they are, on the

whole, excellent and some might even be considered outstanding. Apparently only superior photographs were considered, and the printer deserves credit for reproducing this material with its original clarity, brilliance, and sharpness of detail.

The first section of the book, dealing with the fundamental characteristics of virus infections, is crammed with practical information. There is a good description of microscopy in general and includes phase microscopy and the electron microscope. There is a very lucid account of egg inoculation techniques and the presentation is enhanced by the use of schematic drawings and of photographs to show the method of procedure for the several routes of inoculation. The measurement of virus infectivity and of antiviral activity is briefly, yet clearly, described, and the use of the 50% endpoint method is illustrated by a simple example. One very useful compilation is that of staining procedures employed in virology, together with a detailed description of each method.

The information within this book is surprisingly up to the minute as can be seen, for example, by reading the chapters on influenza or on poliomyelitis. In connection with poliomyelitis, recent advances in tissue culture methodology are described, and the appearance of normal and of infected cells is illustrated by excellent photomicrographs. The chapters on the various infectious diseases are of variable length and cover only the most important aspects of etiology, host range, pathogenesis, epidemiology, prophylaxis, and treatment. This gives the instructor the opportunity to add such detail as seems desirable and to channel the presentation along the lines of primary interest of the class being taught; the presentation to medical students would stress aspects different than those emphasized to a class composed of students in nursing or of bacteriology, and so forth. The list of items suggested for further reading at the end of each chapter is useful and can be used to emphasize any aspects the lecturer deems desirable.

Everything considered, this is a very good book, and can be recommended to teachers and students alike. The busy clinician, especially, will find its conciseness an asset.

EDWIN H. LENNETTE, M.D.

Basic Bacteriology. Carl Lamana and M. Frank Mallette. Baltimore: The Williams and Wilkins Co.; 1953. XIV plus 677. $10.00.

Basic Bacteriology is just that, a text in the basic aspects of the science discussed under fourteen chapter headings ranging from "Occurrence and Taxonomy of Bacteria" through "General Properties of Bacteria", "Microscopy", "Dyes and Staining", structure, growth, to "Bacterial Metabolism" and "Chemical Disinfection".

The authors point out that, in general, departments of bacteriology require their major students have some preparation in the basic sciences and general biology, but the courses in which the students acquire this necessary background do not present the principles from the point of view of the interest and need of the bacteriologist. The authors, therefore, have introduced a discussion of fundamental physical, chemical and biological problems into a bacteriology text, a welcome introduction in that these fundamentals are presented as tools, not as isolated facts, the use of which by the student is left to memory or chance.

The subjects discussed are thoroughly handled resulting in a text that has balance of context. The context, however, is limited to that defined by the title and no discussion of any specific organism or group of organisms is to be found here. Thus, the text is of value only to those who have some working knowledge of bacteria, the group for which this text was written.

Basic Bacteriology is a text of dynamic bacteriology, the bacteriology that attempts to explain, through the application of the fundamental laws and reactions of the basic sciences, the how and why of bacteria; those who are interested in these questions will find it a valuable book. Those students who are interested in the descriptive aspects of bacteriology as well as those who "couldn't understand physics and mathematics so took up biology" will shun it.

Influenza and Other Virus Infections of the Respiratory Tract. C. H. Stuart-Harris. Edw. Arnold & Co., London. Williams & Wilkins Co., Baltimore (1953). 235 p., 98 illus., and 24 tables. $6.00.

This small volume is written by a pioneer in the field of influenzal research. In the preface, Dr. C. H. Andrewes suggests that the book should be especially valuable to the alert "G.P." as well as to public health workers, clinical pathologists and advanced students. To these categories may be added the medical microbiologist, be he either a teacher or a practitioner.

Somewhat over half of the text is devoted to influenza. Single chapters cover the subjects of febrile catarrh, primary atypical pneumonia, psittacosis, Q fever and the common cold. Differential diagnosis and prevention of acute respiratory diseases are treated separately.

The book is well documented with case histories drawn from the experience of the author. Symptomatology and physical signs are presented in tabular form. Roentgenograms show pulmonary changes which may occur in influenza and primary atypical pneumonia. In the chapter on the pathology of influenza, excellent photomicrographs illustrate stages in the development of nasal and pulmonary lesions in the ferret and these are compared with pulmonary lesions of staphylococcal-influenza

pneumonia in man. The chapter on laboratory diagnosis of influenza is concise and covers all essential points. Comparative results obtained from the utilization of different diagnostic procedures are presented and interpreted.

The book is nicely printed and should serve a useful purpose; it is to be regretted that the price is exorbitant.

R. L. THOMPSON.

Disease in Plants. An Introduction to Agricultural Phytopathology. Neil E. Stevens and Russell B. Stevens. The Chronica Botanica Co., Waltham, Mass.: 1952. 206 p., 61 fig. $4.75.

Even in a branch of science relatively as young as plant pathology, the accumulated observations and concepts, which must constitute the bulk of any treatise on the subject, far exceed the novel ideas that emanate from any one- or five-year period of its development. The difference between one textbook and another in this field is less a matter of what new concepts are presented than how old ones are selected and analyzed.

In the last five years at least four important textbooks of phytopathology, in English, have appeared. Some have excelled in detailed coverage of information, some in critical expounding of terminology and principles; the present volume is distinctive in its concise and graphic elucidation of carefully selected topics, both those that have been and currently are significant in plant pathology. The characteristics of this book also distinguished the habits of thought and expression of the senior author in life, for he had a talent for seeing through a maze of detail and grasping the essential facts. The junior author's special contribution has been a versatile acquaintance with recent developments in related disciplines. For example, of special interest to bacteriologists but at least novel in a textbook of plant pathology, are extracts from the writings of Delbrück, Lederberg, and Luria on the genetics of bacteria and on bacteriophagy. Burnet is quoted on viruses as well as those who have been concerned only with virus manifestations in plants.

The book is organized in the form of twenty lectures, each more or less autonomous, covering not only the familiar subjects of kinds of pathogens, disease symptoms and effects, and predisposition of the host, but also presenting comprehensive reviews of such topics as plant disease and human welfare, nutritional factors in parasitism, weather and soil factors, variation and physiological specialization in pathogens, the economy of disease control, breeding for disease resistance, insects and plant diseases. Extensive use is made of quotations from review journals, such as the Botanical Review. Literature citations have been rigorously sifted for significance. An interesting feature is the inclusion of quotations and illustrations from the literature of the pre-scientific and historically important though somewhat neglected period of phytopathology.

It is a commendable work.

FREEMAN A. WEISS

Influenza C. H. Stuart-Harris. Baltimore, Md.: Williams and Wilkins Co.; 1953. 111 + 235 pp. $6.00.

Textbook of Virology. Andrew James Rhodes and C. E. van Rooyan, Baltimore, Md.: Williams and Wilkins Co.; 2nd Edition 1953. 561 pp. 76 illus. $8.00.

Immunity Hypersensitivity and Serology. Sydney Raffel. New York: Appleton Century Crofts, Inc.; 1953. 495 pp. $8.00.

Biological Stains. H. J. Conn. Geneva, N. Y.: Biotech Publications; Sixth Edition 1953. 367 pp. $5.00.

The Literature on Streptomycin. 1944–1952. Selman A. Waksman. New Brunswick, N. J.: Rutgers University Press; 1952. XII + 553 pp. $5.00

The Nature of Virus Multiplication. The Second Symposium of the Society for General Microbiology. Sir Paul Fildes and W. E. Van Heyningen, Editors. New York: Cambridge University Press; 1953. $6.50.

NEW MEMBERS

New Emeritus Member

Smith, Nathan R., 322 S. Washington Drive, St. Armands Key, Sarasota, Florida

New Active Members

June 2, 1953 through July 16, 1953

Abramson, Carl, 2035 Knorr Street, Philadelphia, Penna.

Anacker, Robert Leroy, Dept. of Microbiology, Univ. of Washington, Seattle 5, Washington

Barlet, Robert L., 63 Eureka Street, Pasadena 3, California

Beauregard, Anne-Marie T., 161 Montgomery St., Pawtucket, Rhode Island

Colling, Margaret J., 6446 Colby Street, Oakland 9, California

Collinson, Allan H., SOL Hospital, Kuala, Belait, State of Brunei
Colon, Alba E., 4445 S.W. 7th St., Miami, Fla.
Dorsey, Arthur E., Route 5, (% P. Reid), Frederick, Md.
Duerr, Edith L., Apt. 1507, 320 East 42nd Street, New York 17, New York
Fitzgerald, Bernard J., 710 Peachtree St., N.E., Atlanta 5, Ga.
Goodman, Donald A., 107 South 58th Street, Philadelphia, Penna.
Grant, Dale W., Pacific Yeast Products, Inc., Wasco, California
Guenther, Ray W., Fisheries Building, Univ. of Washington, Seattle, Washington
Haines, Richard F., Department of Bacteriology, Univ. of Michigan Medical School, Ann Arbor, Michigan
Hamilton, Bette W., 5408 Mohawk, Kansas City 3, Kansas
Hartwig, Eldert C., Jr., 1567 Charon Road, Jacksonville 5, Fla.
Harvey, Ann C., 104 Fourth Ave., Oneonta, Alabama
Holder, Maxine A., Department of Bacteriology, Pathological Institute, University Avenue, Halifax, Nova Scotia, Canada
Howe, Calderon, Dept. of Microbio., Columbia Univ. Coll. of Physicians & Surgeons, 630 West 168th Street, New York 32, New York
Ingols, Robert S., Engineering Experiment Station, Georgia Tech., Atlanta, Georgia
Kennell, Wilfrid C., 515 South Cedar Avenue, Fresno 2, California
Larson, Adelien, Hooper Foundation, 3rd Ave. & Parnassus, San Francisco 22, Calif.
Lipmann, Fritz A., Massachusetts General Hospital, Fruit Street, Boston 14, Massachusetts
Live, Israel, School of Veterinary Medicine, Univ. of Pennsylvania, Philadelphia 4, Pa.
Magee, Lyman A., Box 6455, University Station, Baton Rouge 3, La.
Mahanta, Kanak C., Assam Agricultural College, Jorhat, Assam, India
Marston, Judith, Univ. of Texas Dental Branch, P.O. Box 8277, Houston, Texas
Morgan, Joseph F., Laboratory of Hygiene, Dept. of Nat'l Hlth & Welfare, 45 Spencer Street, Ottawa, Canada
Morris, Myron, Dept. of Medical Microbiology, University of Wisconsin, Madison 6, Wisconsin
Noble, Kathryn R., 3552 Mifflin Avenue, San Pablo, Calif.
Odden, Constance O., Minnesota Dept. of Health, University Campus, Minneapolis, Minnesota
Oxley, Mary E., 1869 California St., Apartment #6, San Francisco 9, Calif.
Palazzo, Claire B., 8 Crest Road East, Rolling Hills, Calif.
Pentz, E. Irene, 8100 So. Crandon Avenue, Chicago 17, Illinois
Phillips, J. Neal, Jr., United States Movidyn Corp., 863 N. Orleans Street, Chicago 10, Illinois
Pierce, William A., Jr., Dept. of Microbiology, Tulane Medical School, New Orleans, Louisiana
Poley, George W., 942 West 35th Street, Los Angeles 7, California
Riley, William Herod, Jr., P. O. Box 8392, Tampa 4, Fla.
Romney, Claire B., 116–45 170 St., Jamaica 5, L.I., New York
Rosenfeld, Martin H., 150–33 Hoover Ave., Jamaica 32, N. Y.
Ross, Richard T., 111 Sutherland Village, Knoxville, Tenn.
Scallion, Robert J., 164 South Street, Hartford, Conn.
Schutter, Jane C., 1834 Gresham Road, Louisville, Ky.
Schwarzendruber, William H., 921 First Nat'l. Bank Bldg., Peoria 2, Illinois
Seabrandt, James L., Dept. of Bacteriology, State Coll. of Washington, Pullman, Washington
Senos, Georgia D., 17426 Mitchell Street, Detroit 12, Michigan
Skaliy, Peter, U. S. Public H'lth Service, CDCA TDL, Detroit 31, Michigan
Snell, Neva S., 2206 Haste Street, Berkeley 4, California
Suriano, Joseph R., Department of Bacteriology, Indiana University, Bloomington, Indiana
Tamm, Igor, Hosp. of The Rockefeller Institute for Med. Research, 66th Street & York Avenue, New York 21, New York
Tew, Richard W., Birge Hall, University of Wisconsin, Madison, Wisconsin
Tirol, Thielma L., 511 East Washington, Urbana, Illinois
Turpanjian, John M., 946 Edgewater Avenue, Ridgefield, New Jersey
Walsh, John R., 3145 Avenue W., Brooklyn 29, New York
Welsh, James N., Independence Ave., Trenton 10, N. J.
West, Billy, 2017 Galbraith Drive, Nashville 12, Tennessee
Witton, Catherine J., Simmons College, Boston 15, Mass.
Wright, George G., S-Division, Camp Detrick, Frederick, Md.
Yamashita, Joe Y., Dept. of Bacteriology, University of California, Los Angeles 24, California
Yucker, Major Julius L., Jr., 471 Napoleon Ave., Columbus 13, Ohio

CUMULATIVE INDEX
TO THE
JOURNAL OF BACTERIOLOGY

Volumes 31 to 64 (1937–1952)

INCREASE THE USEFULNESS of your volumes of the Journal.
Locate the EXACT INFORMATION you need—quickly and easily.
Turn to ANY SUBJECT—any author—from any issue—with a minimum of time and effort.
Find ALL the articles that have appeared in the Journal on the topic of particular interest to you.
Available Now. Send in your order promptly—the supply is limited.

THE WILLIAMS & WILKINS COMPANY
Mt. Royal and Guilford Aves., Baltimore 2, Maryland

Please send: CUMULATIVE INDEX to the JOURNAL OF BACTERIOLOGY, Vols. 31-64. I enclose $7.50

NAME_____

ADDRESS _____

AGAIN AVAILABLE

By **Paul F. Clark,** Professor of Bacteriology, University of Wisconsin Medical School; Past President, Society of American Bacteriologists

Alice in Virusland

A whimsical account of the microbes' war on man, containing such gems as "Wriggle, wriggle, Spirochaete, How I wonder what you eat!" and The Coccus and the Spirochaete were walking down the strand." Featured is the Trial of the Human Race before the Microbe Parliament.

Presented as the Presidential address before the S. A. B., San Francisco, August 31, 1938.

23 pp., illus., $1.25 post paid

Please send remittance with order to

THE SOCIETY OF AMERICAN BACTERIOLOGISTS
Mt. Royal and Guilford Aves. Baltimore 2, Maryland